REMARKS

Claims 11 and 17 have been amended to incorporate one part of now-canceled claim 13. Claim 13 calls for the lens elements of the exit lens part to be either convex or concave toward the exit surface of the lenticular lens sheet; claims 11 and 17 now recite the convex feature while two new independent claims, discussed herein, recite the concave feature. Claim 15 has been canceled also because it depends from previously canceled claim 12. New claims 22 and 26 have been added based upon claims 11 and 17 with the remaining part (the concave aspect) of now-canceled claim 13 placed therein. New claims 23, 24, and 25 are based upon original claims 15, 16, and 20, respectively while new claims 27 and 28 are based upon claims 19 and 21, respectively. Thus, the claims before the Examiner for consideration are claims 11, 14, 16, 17, and 19 to 28.

Applicants respectfully submit that the claims before the Examiner patentably define over the art cited during the prosecution to date. The Examiner is directed to both the Amendment Under 37 CFR 1.111 filed May 29, 2002 and the Amendment Under 37 CFR 1.116 filed December 16, 2002. As explained in detail in those papers, there is no reason for the person of ordinary

skill in the art following a reading of the primary reference (directed to a double-sided lenticular lens sheet) to believe that it was necessary further to revise the structure to have a special means for reducing external light. The "double-sided" lenticular lens sheet of Yoshimura et al. '031 is of a type designed to reduce external light without having to provide other means for external light reduction. The secondary reference EP '460 relates to a "single-sided" lenticular lens sheet and there is no proper reason, hindsight not being a proper reason, to combine the Yoshimura et al. '031 and EP '460 teachings. There is no exit lens part in the EP '460 lenticular lens sheet and there is no good reason to incorporate a feature thereof in the Yoshimura et al. '031 lenticular lens sheet, which contains an exit lens part. Nor do the references in combination teach or suggest the lenticular lens sheet or rear projection screen containing same of the present claims which specify also that the lens elements of the exit lens part are convex or concave toward the exit surface of the lenticular lens sheet.

Applicants once more ask the Examiner to acknowledge the Request for Approval of Drawing Change filed August 28, 2001.

Favorable treatment of claims 11, 14, 16, 17, and 19 to 28 is earnestly solicited.

The Examiner is requested to telephone the undersigned if additional changes are required in the case prior to allowance.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

February 6, 2003
Date

Charles A. Wendel
Registration No. 24,453

CAW/ch

Attorney Docket No.: DAIN:518A

PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, Virginia 22314-2805
Telephone: (703) 739-0220

Version with Markings to Show Changes Made

7. A rear projection screen comprising:

a lenticular lens sheet having an entrance surface and an exit surface; and

a Fresnel lens sheet disposed opposite to the entrance surface of the lenticular lens sheet facing an image light source,

wherein the lenticular lens sheet has: a base part; an entrance lens part formed on the entrance surface and having an array of a plurality of convex lens elements capable of gathering light rays; and a light absorbing layer formed in light-nongathering regions in the exit surface in which light rays refracted by the convex lens elements do not gather; the entrance lens part being provided with a tinted layer at least in a portion thereof near the entrance surface.

8. The rear projection screen according to claim 7, wherein the lenticular lens sheet further comprises an exit lens part formed on the exit surface and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather.

9. The rear projection screen according to claim 7, further comprising a front plate disposed opposite to the exit surface of the lenticular lens sheet;

wherein the front plate has a tinted layer formed near an entrance surface thereof or an exit surface thereof, or the front plate is entirely tinted.

10. The rear projection screen according to claim 7, wherein the lenticular lens sheet has a tinted layer formed near the exit surface thereof.

11. (Twice Amended) A lenticular lens sheet having an entrance surface and an exit surface comprising:

a base part;

an entrance lens part forming the entrance surface of the

Version with Markings to Show Changes Made

lenticular lens sheet and having an array of a plurality of convex lens elements capable of gathering light rays;

an exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather, the lens elements of the exit lens part being convex toward the exit surface of the lenticular lens sheet; and

a light absorbing layer formed in light-nongathering regions in the exit surface of the lenticular lens sheet in which light rays refracted by the convex lens elements of the entrance lens part do not gather;

wherein a tinted layer is formed at least in a portion of the entrance lens part near the entrance surface of the lenticular lens sheet.

12. The lenticular lens sheet according to claim 11, further comprising an exit lens part disposed on the flat exit-side surface of the base part, the exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather.

13. The lenticular lens sheet according to claim 12, wherein the lens elements of the exit lens part are either convex or concave toward the exit surface of the lenticular lens sheet.

14. The lenticular lens sheet according to claim 11, wherein the tinted layer contains a light diffusing material.

15. The lenticular lens sheet according to claim 11, wherein the tinted layer contains a light diffusing material.

16. The lenticular lens sheet according to claim 11 wherein the tinted layer extends along the light receiving surface of the entrance lens part.

17. (Thrice Amended) A rear projection screen comprising:

a lenticular lens sheet having an entrance surface and an exit surface; and

Version with Markings to Show Changes Made

a Fresnel lens sheet disposed opposite to the entrance surface of the lenticular lens sheet facing an image light source,

wherein the lenticular lens sheet has: a base part;

an entrance lens part forming the entrance surface of the lenticular lens sheet and having an array of a plurality of convex lens elements capable of gathering light rays;

an exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather, the lens elements of the exit lens part being convex toward the exit surface of the lenticular lens sheet; and a light absorbing layer formed in light-nongathering regions in the exit surface of the lenticular lens sheet in which light rays refracted by the convex lens elements of the entrance lens part do not gather, the entrance lens part being provided with a tinted layer at least in a portion thereof near the entrance surface of the lenticular lens sheet.

18. The rear projection screen according to claim 17, wherein the lenticular lens sheet further comprises an exit lens part disposed on the flat exit-side surface of the base part, the exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather.

19. The rear projection screen according to claim 17, further comprising a front plate disposed opposite to the exit surface of the lenticular lens sheet;

wherein the front plate has a tinted layer formed near an entrance surface thereof or an exit surface thereof, or the front plate is entirely tinted.

20. The lenticular lens sheet according to claim 11, wherein

the base part has a flat entrance-side surface and a flat exit-side surface;

the entrance lens part is disposed on the flat entrance-side

surface of the base part; and

the exit lens part is disposed on the flat exit-side surface of the base part.

21. The rear projection screen according to claim 17, wherein the base part of the lenticular sheet has a flat entrance-side surface and a flat exit-side surface;

the entrance lens part of the lenticular lens sheet is disposed on the flat entrance-side surface of the base part; and

the exit lens part of the lenticular lens sheet is disposed on the flat exit-side surface of the base part.

22. (New) A lenticular lens sheet having an entrance surface and an exit surface comprising:

a base part;

an entrance lens part forming the entrance surface of the lenticular lens sheet and having an array of a plurality of convex lens elements capable of gathering light rays;

an exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather, the lens elements of the exit lens part being concave toward the exit surface of the lenticular lens sheet; and

a light absorbing layer formed in light-nongathering regions in the exit surface of the lenticular lens sheet in which light rays refracted by the convex lens elements of the entrance lens part do not gather;

wherein a tinted layer is formed at least in a portion of the entrance lens part near the entrance surface of the lenticular lens sheet.

23. (New) The lenticular lens sheet according to claim 22, wherein the tinted layer contains a light diffusing material.

24. (New) The lenticular lens sheet according to claim 22 wherein the tinted layer extends along the light receiving surface of the entrance lens part.

25. (New) The lenticular lens sheet according to claim 11,

wherein

the base part has a flat entrance-side surface and a flat exit-side surface;

the entrance lens part is disposed on the flat entrance-side surface of the base part; and

the exit lens part is disposed on the flat exit-side surface of the base part.

26. (New) A rear projection screen comprising:

a lenticular lens sheet having an entrance surface and an exit surface; and

a Fresnel lens sheet disposed opposite to the entrance surface of the lenticular lens sheet facing an image light source,

wherein the lenticular lens sheet has: a base part;

an entrance lens part forming the entrance surface of the lenticular lens sheet and having an array of a plurality of convex lens elements capable of gathering light rays;

an exit lens part forming the exit surface of the lenticular lens sheet and having an array of a plurality of lens elements formed respectively in light-gathering regions in which light rays refracted by the convex lens elements of the entrance lens part gather, the lens elements of the exit lens part being concave toward the exit surface of the lenticular lens sheet; and a light absorbing layer formed in light-nongathering regions in the exit surface of the lenticular lens sheet in which light rays refracted by the convex lens elements of the entrance lens part do not gather, the entrance lens part being provided with a tinted layer at least in a portion thereof near the entrance surface of the lenticular lens sheet.

27. (New) The rear projection screen according to claim 26, further comprising a front plate disposed opposite to the exit surface of the lenticular lens sheet;

wherein the front plate has a tinted layer formed near an entrance surface thereof or an exit surface thereof, or the front plate is entirely tinted.

28. (New) The rear projection screen according to claim 26,

Version with Markings to Show Changes Made

wherein

the base part of the lenticular sheet has a flat entrance-side surface and a flat exit-side surface;

the entrance lens part of the lenticular lens sheet is disposed on the flat entrance-side surface of the base part; and

the exit lens part of the lenticular lens sheet is disposed on the flat exit-side surface of the base part.